UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,299	04/19/2004	Sung-hi Lee	1349.1357	9802

21171   7590   04/14/2009
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ART UNIT	PAPER NUMBER
2625	

MAIL DATE	DELIVERY MODE
04/14/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/826,299	LEE, SUNG-HI
Office Action Summary	Examiner	Art Unit	
	AKWASI M. SARPONG	2625	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 September 2008</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-12 and 14-21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-12 and 14-21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>19 April 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

       1.☒ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>04/19/2004 and 06/13/2005</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set
forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this
application is eligible for continued examination under 37 CFR 1.114, and the fee set
forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action
has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on
11/04/2008 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

2.   Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite
for failing to particularly point out and distinctly claim the subject matter which applicant
regards as the invention. Applicant claims in clam 1 the limitation " and selectively
perform the function of ---". However it is not clear if it is printing apparatus or the user
or the hardware that is selectively performing the function.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claim1-12 and 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (6735641) in view of Chapin (20030231328).

Claim 1, Kobayashi discloses a printing apparatus **(Management unit 1 and Printers 3-1 shown in Fig. 5)** to perform a printing operation by driving hardware **(Printer mechanism engine unit 74 shown in Fig. 18)** provided thereto according to a printing command received from a user **(the print data is received by the print engine unit 74 from remote unit 12 which has to used by an operator or a user- please see Fig. 4)**

NB: Col. 10 lines 1-10 thus the print data is sent through network 2 to the print mechanism engine unit 74 for the print data to be printed.

a firmware unit **(Unit 71, shown in Fig 18)** to store function information **(firmware or programs or software)** of a particular model, **(Storage 87 stores firmware or programs that are applicable to the particular printer connected - see Col. 11 lines 29-45)** supported by a common firmware, **(Firmware stored in unit 87 is common to both those used by that particular model or version of printer and other printers)** of the printing apparatus, **(Printer 3-1 shown in fig. 5)** and selectively perform the function of one of the plurality of functions **(the firmware applying unit 86 determines which version of firmware or program is applicable to printer 3-1 that can perform some functions such as email and fax and printing - see Col. 11 lines 29-42)** which corresponds to a model index designated by a manufacturer **(all**

printers are make by a manufacturer with a model name, inherent; column 12,

lines 25-30 teaches mail function, or fax function, when it is require the fax

function, the system will select the fax function and vice versa) as the printing

apparatus is initialized. **(Col. 11 lines 29-42- the program for controlling the**

firmware applying unit load up anytime the power source in turned on

(initialization) Please also Col. 11 lines 43-48).

Kobayashi does not teach that the firmware stores information that can control a

plurality of models of printers.

Chapin discloses a firmware that stores information **(Section 0019, line 4, multi**

printer driver) that can control a plurality of models of printers **(Section 0019, lines 14-**

15-all the different models of printers 6200,4400 and 7300). (Section 0019, lines 4-

15 explains that multiple printer driver operates all the different models on the

network). Therefore it will be obvious to one skilled in the art to modify Kobayashi's

Firmware unit 71 to includes Chapin's firmware (multiple printer drivers) this will enable

Kobayashi's printer have a firmware unit that can be used in a different series of models

of printers. The motivation for doing this is since the firmware (multiple printer drivers)

can be used in a plurality of different models of printers, it will unable users to use one

firmware for a plurality of printers.

Claim 2, Kobayashi in view of Chapin discloses wherein the firmware unit

comprises:

a storage unit **(Kobayashi: Firmware storage unit 87 shown fig. 18)** to store

the function information of the plurality of models therein. **(Kobayashi: Col. 11 lines 31-**

42- thus the firmware storage 87 has both the applicable firmware or program and the non-applicable firmware- therefore the applicable firmware is for that particular printer while the non-applicable firmware is for other models which can use the firmware or program)

a model index processing unit **(Kobayashi: a portion of Firmware applying unit 86 shown in Fig. 18 that makes the designation of which firmware corresponds to which type or version of printer 3-1)** to store a model index designation command received from outside the firmware unit extract from the storage unit the function information which corresponds to the model index designated by the model index designation command upon the initialization of the printing apparatus, **(Kobayashi: Col. 11 lines 34-42- thus it inherent that firmware applying unit 86 will have a means of matching a firmware to its corresponding model or version of printer)** and output the extracted function information **(Kobayashi: Col. 11 lines 35-36- thus if the firmware is applicable then the firmware is stored in storage 90**)

(Kobayashi: NB: Col. 12 lines 24-25 understand that the stored firmware or program is a function information that controls some functions such as facsimile and emailing and printing) and

a firmware driving unit **(Kobayashi: the portion of real operation firmware storage unit 88 that controls the printing operation as discussed in Col. 11 lines 46-48)** to control the hardware to receive the function information and perform a corresponding function. **(Kobayashi: Col. 11 lines 43-48- thus when the applicable**

version of firmware is stored in the printer the firmware or program controls all

the functions carried out by the printer).

Claim 3, Kobayashi in view of Chapin discloses wherein the firmware unit **(Unit**

71 in Fig. 18) further comprises:

a data receiving unit (Kobayashi **: the portion of printing system unit 72 in**

Fig. 18 that receives the printing data before it is processed Col. 10 lines 1-5) to

receive data from outside the firmware unit, (Kobayashi: **Col. 10 lines 2-5 thus the**

print data is received from network 2 which is outside of unit 71 which is the

firmware unit) and transmit the model index designation command to the model index

processing unit in response to the model index designation command being in the

received data **(Kobayashi: Col. 10 lines 6-10- thus the firmware stored in the**

firmware storage unit 87 controls prints the print data according to the control

signal generated by control unit 73 from the received print data)

a data processing unit **(Kobayashi: the portion of printing system unit 72 in**

Fig. 18 that processes the printing data- Col. 10 lines 1-5) to receive the data

excluding the model index designation command from the data receiving unit, and

convert the data into corresponding printer language; **(Kobayashi: Col. 10 lines 2-5-**

hence the processed print data has to be in the appropriate print language for it

to be printed) and

NB: Col. 11 lines 30-35- thus the programs or firmware are received via the applying unit 86 and therefore the print data and the programs (model index designation command) are separately received.

a data printing unit **(Kobayashi: Print engine 74 shown in Fig. 18)** to control the hardware to output the converted data onto a printing medium. **(Kobayashi: Col. 10 lines 17-25-thus the processed data is printed by print engine 74).**

Claim 4, Kobayashi in view of Chapin discloses further comprising a developing unit and a fusing unit to output the converted data onto the printing medium, **(Kobayashi: Portion of printer mechanism engine unit 74 inherently will have both developing and fusing unit because the processed image data will have to be developed and blend together before it can be printed as discussed in Col. 17-26)** wherein the developing unit and the fusing unit are controlled by the data printing unit. **(Kobayashi: Col. 10 lines 6-16- thus the mechanism control unit 73 controls the print engine 74 to print the processed data and therefore controls the developing and fusing units)**

Claim 5, Kobayash in view of Chapin discloses wherein the model index designation command is transmitted along with initialization files through a printer interface during the manufacturing of the printing apparatus, **(Kobayashi: Col. 11 lines 29-42- thus the responsibility of determining which version or model of printer corresponds to which program or firmware or function information was assigned**

to the firmware applying unit 86 by the entrepreneur of the printer because the

firmware or program that controls the applying unit load up at the time the power

source in turned on (initialization) – hence the user cannot change that

designation program) -Please also Col. 11 lines 43-48) so that the model index

designation command is processed upon the initialization of the printing apparatus.

(Kobayashi: Col. 11 lines 34-40- thus applying unit inherently teaches model

index designation command because that is the way it make the determination of

which program or firmware is applicable to which version or model of printer)

       Claim 6, Kobayash in view of Chapin discloses the model index designation

command is transmitted in a separate command file that is transmitted through a printer

interface **(Kobayashi: Network communication control unit in Fig. 18)** to be

processed by the firmware unit. **(Kobayashi: Col. 11 lines 20-24- thus the firmware**

(model index designation command) is transmitted separately because that is

received into the firmware storage unit 87 while the actual printer data is received

by the printing system unit 72)

       Claim 7, Kobayashi discloses a method of supporting a particular of model of a

       printing apparatus **(Kobayashi: Storage 87 stores firmware or programs that**

is used to control the applicable to printer - see Col. 11 lines 29-45) by a common

firmware, **(Kobayashi: Firmware stored in unit 87 is common to both those used**

by that particular model or version of printer and other printers) the method

comprising:

confirming a model index designation command which designates a model index

corresponding to one of the plurality of printing apparatus models, **(Kobayashi: the**

firmware applying unit 86 determines which version of firmware or program is

applicable to printer 3-1 -see Col. 11 lines 29-42) during a manufacturing operation

(Kobayashi: Col. 11 lines 29-42- the program for controlling the firmware applying

unit load up anytime the power source in turned on (initialization) before the user

can even operate the system and therefore this is designated by the manufacturer

or entrepreneur –Please also Col. 11 lines 43-48)

extracting function information corresponding to the one of the plurality of printing

apparatus models which is designated by the model index designation command

(Kobayashi: Col. 11lines 30-41- thus the when the program is transmitted to the

firmware unit 87 the applicable firmware to that printer is stored into a separate

area (unit 90 in Fig. 8) while the non applicable firmware is also stored in another

area (storage 89)) confirming a function of the designated model using the function

information; and performing the function. **(Kobayashi: Col. 11 lines 30-42- thus the**

applying unit confirms the firmware to its corresponding version or model of

printer by making the judgment of which firmware or software corresponds to its

model or version of printer)

Kobayashi does not teach that the firmware stores information that can control a plurality of models of printers.

Chapin discloses a firmware that stores information **(Section 0019, line 4, multi printer driver)** that can control a plurality of models of printers **(Section 0019, lines 14-15-all the different models of printers 6200,4400 and 7300). (Section 0019, lines 4-15 explains that multiple printer driver operates all the different models on the network).** Therefore it will be obvious to one skilled in the art to modify Kobayashi's Firmware unit 71 to includes Chapin's firmware (multiple printer drivers) this will enable Kobayashi's printer have a firmware unit that can be used in a different series of models of printers. The motivation for doing this is since the firmware (multiple printer drivers) can be used in a plurality of different models of printers, it will unable users to use one firmware for a plurality of printers.

Claim 8, Kobayashi in view of Chapin discloses that the method further comprising inputting the model index designation command and storing the command in an initialization file and confirming the model index designation command by executing the initialization file. **(Kobayashi: Col. 11 lines 42-48- thus the program that controls the applying unit is stored in a RAM and it loads up power is applied to the printing unit and therefore this is done by the manufacturer since the program loads up before the device is initialized).**

Claim 9, Kobayash in view of Chapin discloses that the method further

comprising writing a separate file which stores therein the model index designation

command storing the file in the printing apparatus through a printer interface (Kobayash:

Col. 11 lines 43-47, real operation firmware storage unit 88- thus the program or

firmware is stored in a RAM as it is stated) and confirming the model index

designation command by executing the file. **(Kobayash: Col. 11 lines 42-46- thus the**

firmware is confirmed when it is loaded up any time the unit is powered up)

Claim 10, Kobayashi in view of Chapin discloses wherein the function of a basic

model that is previously set is performed in response to there being no function

information corresponding to the designated model index. **(Kobayashi: Col. 11 lines**

29-42- thus if no new firmware is received then the applying unit will not perform

any determination or function)

Claim 11, Kobayash discloses a firmware unit **(the portion of Unit 71 that**

contains programs and firmware, shown in Fig 18) of a printing apparatus

(Management unit 1 and Printers 3-1 shown in Fig. 5) to control the printing

apparatus, **(the firmware or programs controls the print mechanism 74 to print the**

processed data-see Col. 10 lines 17-25) wherein the firmware unit stores function

information of a particular of model, supported by a common firmware, **(Firmware**

stored in unit 87 is common to both those used by that particular model or

version of printer and other printers) of the printing apparatus, **(Printer 3-1 shown in**

fig. 5) and controls the printing apparatus according to the function information

corresponding to the printing apparatus **(the firmware applying unit 86 determines**

which version of firmware or program is applicable to printer 3-1 that can perform

some functions such as email and fax and printing - see Col. 11 lines 29-42 in the

printer) set at a time of manufacture. **(Col. 11 lines 29-42- the program for**

controlling the firmware applying unit load up anytime the power source in turned

on (initialization) before the user can even operate the system and therefore this

is designated by the manufacturer or entrepreneur –Please also Col. 11 lines 43-

48).

Kobayashi does not teach that the firmware stores information that can control a

plurality of models of printers.

Chapin discloses a firmware that stores information **(Section 0019, line 4, multi**

printer driver) that can control a plurality of models of printers **(Section 0019, lines 14-**

15-all the different models of printers 6200,4400 and 7300). (Section 0019, lines 4-

15 explains that multiple printer driver operates all the different models on the

network). Therefore it will be obvious to one skilled in the art to modify Kobayashi's

Firmware unit 71 to includes Chapin's firmware (multiple printer drivers) this will enable

Kobayashi's printer have a firmware unit that can be used in a different series of models

of printers. The motivation for doing this is since the firmware (multiple printer drivers)

can be used in a plurality of different models of printers, it will unable users to use one

firmware for a plurality of printers.

Claim 12, Kobayash discloses a firmware unit **(the portion of Unit 71 that contains programs and firmware, shown in Fig 18)** to control a printing apparatus, **(Management unit 1 and Printers 3-1 shown in Fig. 5)** wherein the firmware unit stores function information of a particular of model of the printing apparatus, **(Storage 87 stores firmware or programs that are applicable to the particular printer connected - see Col. 11 lines 29-45)** and controls the printing apparatus according to the function information corresponding to the printing apparatus, **(the firmware applying unit 86 determines which version of firmware or program is applicable to printer 3-1 that can perform some functions such as email and fax and printing - see Col. 11 lines 29-42 in the printer)** with a storage unit **(firmware storage unit 87 in Fig. 18)** to store the function information of the particular of models, **(Col. 11 lines 20-29- thus unit 87 stores the firmware for the whole unit 71)** supported by a common firmware, **(Firmware stored in unit 87 will be common to both those used by that particular model or version of printer and other version of printers on the network)** of the printing apparatus, **(Management unit 1 and Printers 3-1 shown in Fig. 5)**

further comprising a model index processing unit **(a portion of Firmware applying unit 86 shown in Fig. 18 that makes the designation of which firmware corresponds to which type or version of printer 3-1)** to store a model index designation command received from outside the firmware unit by a manufacturer, extract the function information corresponding to a model index designated by the model index designation command, **(Col. 11 lines 34-42- thus it inherent that**

firmware applying unit 86 will have a means of matching a firmware to its corresponding model or version of printer) and output the extracted information. **(Col. 11 lines 35-36- thus if the firmware is applicable then the firmware is stored in storage 90**).

Kobayashi does not teach that the firmware stores information that can control a plurality of models of printers.

Chapin discloses a firmware that stores information **(Section 0019, line 4, multi printer driver)** that can control a plurality of models of printers **(Section 0019, lines 14-15-all the different models of printers 6200,4400 and 7300). (Section 0019, lines 4-15 explains that multiple printer driver operates all the different models on the network).** Therefore it will be obvious to one skilled in the art to modify Kobayashi's Firmware unit 71 to includes Chapin's firmware (multiple printer drivers) this will enable Kobayashi's printer have a firmware unit that can be used in a different series of models of printers. The motivation for doing this is since the firmware (multiple printer drivers) can be used in a plurality of different models of printers, it will unable users to use one firmware for a plurality of printers.

Claim 13, - Cancelled.

Claim 14, Kobayashi in view of Chapin discloses that the firmware unit further comprising a data receiving unit **(Kobayashi: the portion of printing system unit 72 in Fig. 18 that receives the printing data before it is processed Col. 10 lines 1-5)** to

receive data from outside the firmware unit, **(Kobayashi: Col. 10 lines 2-5 thus the print data is received from network 2 which is outside of unit 71 which is the firmware unit)** and transmit the model index designation command to the model index processing unit in response to the model index designation command being in the received data. **(Kobayashi: Col. 10 lines 6-10- thus the firmware stored in the firmware storage unit 87 controls print the print data according to the control signal generated by control unit 73 from the received print data).**

Claim 15, Kobayashi in view of Chapin discloses further comprising a data processing unit **(Kobayashi: the portion of printing system unit 72 in Fig. 18 that processes the printing data- Col. 10 lines 1-5)** to receive the data excluding the model index designation command from the data receiving unit and convert the data into corresponding printer language. **(Kobayashi: Col. 10 lines 2-5- hence the processed print data has to be in the appropriate print language for it to be printed)**.

Claim 16, Kobayashi in view of Chapin discloses further comprising a data printing unit **(Kobayashi: Print engine 74 shown in Fig. 18)** to control hardware of the printing apparatus to output the converted data onto a printing medium. **(Kobayashi: Col. 10 lines 17-25-thus the processed data is printed by print engine 74).**

Claim 17, Kobayashi in view of Chapin discloses that further comprising a

firmware driving unit **(Kobayashi: the portion of real operation firmware storage**

unit 88 that controls the printing operation as discussed in Col. 11 lines 46-48) to

control hardware of the printing apparatus to receive the function information and

perform a corresponding function. **(Kobayashi: Col. 11 lines 43-48- thus when the**

applicable version of firmware is stored in the printer the firmware or program

controls all the functions carried out by the printer)

Claim 18, Kobayashi discloses a method of controlling a printing apparatus,

(Storage 87 stores firmware or programs that are applicable to different models of

printers - see Col. 11 lines 29-45) the method comprising:

Storage 87 stores firmware or programs that are applicable to the particular

printer connected - see Col. 11 lines 29-45) supported by a common firmware,

(Firmware stored in unit 87 is common to both those used by that particular

model or version of printer and other printers), of the printing apparatus in the

printing apparatus, designating a model from among the plurality of models at a time of

manufacture, **(the firmware applying unit 86 determines which version of firmware**

or program is applicable to printer 3-1 among the plurality of models in Printers 3-

1--- 3-n-see Col. 11 lines 29-42) and controlling the printing apparatus according to the

function information corresponding to the printing apparatus. **(Col. 10 lines 17-25- thus**

the control signal or program controls the printer mechanism to process and

print the processed data).

Kobayashi does not teach that the firmware stores information that can control a plurality of models of printers.

Chapin discloses a firmware that stores information **(Section 0019, line 4, multi printer driver)** that can control a plurality of models of printers **(Section 0019, lines 14-15-all the different models of printers 6200,4400 and 7300). (Section 0019, lines 4-15 explains that multiple printer driver operates all the different models on the network).** Therefore it will be obvious to one skilled in the art to modify Kobayashi's Firmware unit 71 to includes Chapin's firmware (multiple printer drivers) this will enable Kobayashi's printer have a firmware unit that can be used in a different series of models of printers. The motivation for doing this is since the firmware (multiple printer drivers) can be used in a plurality of different models of printers, it will unable users to use one firmware for a plurality of printers.

Claim 19, Kobayashi discloses a storage **(Firmware storage unit 87in Fig. 18)** comprising firmware to control a particular model of a printing apparatus, wherein the firmware installed in the particular of model at a time of manufacture of the printing apparatus **(Col. 11 lines 29-42- the program loads up as soon as the unit is powered up and therefore it is done before the user has control or access to the unit- please see Col. 11 lines 43-48)**

includes function information of each of that particular model, and controls each of the particular models according to function information corresponding to each of the

particular model. **(Col. 10 lines 34-42- thus the applicable firmware is applied to control the particular model or version of printer)**.

Kobayashi does not teach that the firmware stores information that can control a plurality of models of printers.

Chapin discloses a firmware that stores information **(Section 0019, line 4, multi printer driver)** that can control a plurality of models of printers **(Section 0019, lines 14-15-all the different models of printers 6200,4400 and 7300). (Section 0019, lines 4-15 explains that multiple printer driver operates all the different models on the network).** Therefore it will be obvious to one skilled in the art to modify Kobayashi's Firmware unit 71 to includes Chapin's firmware (multiple printer drivers) this will enable Kobayashi's printer have a firmware unit that can be used in a different series of models of printers. The motivation for doing this is since the firmware (multiple printer drivers) can be used in a plurality of different models of printers, it will unable users to use one firmware for a plurality of printers.

Claim 20, Kobayashi discloses storage **(Firmware storage unit 87in Fig. 18)** comprising firmware to control a particular model of a printing apparatus **(Col. 11 lines 33-38-thus the applicable firmware or program in unit 89 controls that particular model or version of printer among the printers 3-1 -3-n)** the firmware comprising:

a particular of model index functions wherein the firmware controls the models of the printing apparatus according to a respective one of the model index functions designated in response to a model index command **(Col. 11 lines 31-46- thus the**

applying unit 86 judges to match the supplied firmware (model index function) to

its corresponding version) before being initialized by a user. **(Col. 11 lines 43-48-**

thus the current firmware loads up as soon as there is power to the unit and

therefore it is initialized before the user).

Kobayashi does not teach that the firmware stores information that can control a

plurality of models of printers.

Chapin discloses a firmware that stores information **(Section 0019, line 4, multi**

printer driver) that can control a plurality of models of printers **(Section 0019, lines 14-**

15-all the different models of printers 6200,4400 and 7300). (Section 0019, lines 4-

15 explains that multiple printer driver operates all the different models on the

network). Therefore it will be obvious to one skilled in the art to modify Kobayashi's

Firmware unit 71 to includes Chapin's firmware (multiple printer drivers) this will enable

Kobayashi's printer have a firmware unit that can be used in a different series of models

of printers. The motivation for doing this is since the firmware (multiple printer drivers)

can be used in a plurality of different models of printers, it will unable users to use one

firmware for a plurality of printers.

Claim 21, Kobayashi discloses a method of controlling a printing apparatus the

method comprising storing function information of a particular model, **(Storage 89**

stores firmware or programs that are applicable to the models of printers - see

Col. 11 lines 29-45) supported by a common firmware of the printing apparatus in the

printing apparatus, **(Col. 11 lines 24-29, firmware storage 87 shown in Fig. 18**

comprises of both the applicable and not applicable firmware and therefore the whole firmware is common to the applicable program)

designating a model from among the plurality of models at a time of manufacture, and controlling the printing apparatus according to the function information corresponding to the printing apparatus. **(Col. 11 lines 29-42- the program for controlling the firmware applying unit load up anytime the power source in turned on (initialization) before the user can even operate the system and therefore this is designated by the manufacturer or entrepreneur –Please also Col. 11 lines 43-48).**

Kobayashi does not teach that the firmware stores information that can control a plurality of models of printers.

Chapin discloses a firmware that stores information **(Section 0019, line 4, multi printer driver)** that can control a plurality of models of printers **(Section 0019, lines 14-15-all the different models of printers 6200,4400 and 7300). (Section 0019, lines 4-15 explains that multiple printer driver operates all the different models on the network).** Therefore it will be obvious to one skilled in the art to modify Kobayashi's Firmware unit 71 to includes Chapin's firmware (multiple printer drivers) this will enable Kobayashi's printer have a firmware unit that can be used in a different series of models of printers. The motivation for doing this is since the firmware (multiple printer drivers) can be used in a plurality of different models of printers, it will unable users to use one firmware for a plurality of printers.

Response to Arguments

5.   Applicant's arguments filed 09/09/2008 have been fully considered but they are

not persuasive.

     Regarding Claim 1, Applicant argues that the cited reference fails to disclose a

model index designated as the printing apparatus is initialized by a manufacturer.

     In reply, Examiner respectfully disagrees because Kobayashi discloses a model

index designated **(all printers are make by a manufacturer with a model name,**

inherent; column 12, lines 25-30 teaches mail function, or fax function, when it is

require the fax function, the system will select the fax function and vice versa) as

the printing apparatus is initialized by a manufacturer. **Col. 11 lines 29-42- the**

program for controlling the firmware applying unit load up anytime the power

source in turned on (initialization) Please also Col. 11 lines 43-48).

     Regarding Claim 7, Applicant argues that the cited reference fails to disclose

confirming a model index designation command which designates a model index

corresponding to one of the plurality of printing apparatus models, during a

manufacturing operation.

     In reply, Examiner respectfully disagree because Kobayashi discloses

confirming a model index designation command which designates a model index

corresponding to one of the plurality of printing apparatus models, **(Kobayashi: the**

firmware applying unit 86 determines which version of firmware or program is

applicable to printer 3-1 -see Col. 11 lines 29-42) during a manufacturing operation

(Kobayashi: Col. 11 lines 29-42- the program for controlling the firmware applying

unit load up anytime the power source in turned on (initialization) before the user

can even operate the system and therefore this is designated by the manufacturer

or entrepreneur –Please also Col. 11 lines 43-48)

Regarding Claim 20, Applicant argues that the cited reference fails to disclose

that the firmware controls the models of the printing apparatus according to a respective

one of the model index functions designated in response to a model index command

before being initialized by a user.

In reply, Examiner respectfully disagree because Kobayashi discloses controls

the printing apparatus according to the function information corresponding to the

printing apparatus **(the firmware applying unit 86 determines which version of**

firmware or program is applicable to printer 3-1 that can perform some functions

such as email and fax and printing - see Col. 11 lines 29-42 in the printer) set at a

time of manufacture. **(Col. 11 lines 29-42- the program for controlling the firmware**

applying unit load up anytime the power source in turned on (initialization) before

the user can even operate the system and therefore this is designated by the

manufacturer or entrepreneur – Please also Col. 11 lines 43-48).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to AKWASI M. SARPONG whose telephone number is

(571)270-3438. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/
Supervisory Patent Examiner, Art Unit 2625

AMS
03/23/2009.